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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,509	04/05/2001	Karin Lehmann-Bruinsma	AREN-0207	7872

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EXAMINER

LI, RUIXIANG

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/826,509

Applicant(s)

LEHMANN-BRUINSMA ET AL.

Examiner

Ruixiang Li

Art Unit

1646

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED on 1/10/2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☒ Applicant's reply has overcome the following rejection(s): the rejection of claims 101-104 under 102 (b).
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 101-103, 105.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because:

The rejection of claim 105 under 35 U.S.C. 103 (a) remains. The amended claim 103 and claims 101 and 102 which depend upon claim 103 are also rejected under 35 U.S.C. 103(a) as set forth in the previous office action (Paper No. 6 and Paper No. 9). Since claim 103 has been amended, the rejection of claims 101-103 and 105 under 35 U.S.C. 103 (a) is set forth below for the purpose of clarity.

Claims 101-103 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick-Davis et al. in view of Kohen et al. (IDS, AY; J. Neurochem. 66:47-56, 1996). Herrick-Davis et al. teach a method for identifying agonists, antagonists, partial agonists, inverse agonists using non-endogenous, constitutively activated forms of human 5-HT_{2a}/5-HT_{2c} serotonin receptors.

Herrick-Davis et al. fail to teach the use of non-endogenous, constitutively activated forms of human 5-HT₆ serotonin receptors.


Kohen et al. teach the nucleotide and amino acid sequences of a human 5-HT₆ serotonin receptor. The amino acid sequence taught by Kohen et al. has only a single amino acid difference with SEQ ID NO: 449.

Therefore, it would have been obvious for one skilled in the art to make the non-endogenous, constitutively activated forms of human 5-HT₆ serotonin receptor from the cDNA sequence taught by Kohen et al. using the approach taught by Herrick-Davis et al. and to include such mutants in the method of Herrick-Davis et al. One would have been motivated to do so because serotonin receptors are an important class of G-protein coupled receptors, have an important biological activity and are of potential interest to psychopharmacology as taught by Kohen et al. (page 47).

Applicants argue, citing case laws, that the office action has failed to provide any legally sufficient motivation to combine the references and the combination proposed by the office action would still fail to teach or even suggest all the limitations of the claims. This has been fully considered but not deemed to be persuasive for the following reasons.

First, the previous office action stated that one skilled in the art would be motivated to combine the teachings of Herrick-Davis et al. with the teaching of Kohen et al. The Examiner notes that it is not necessary that the claimed invention be expressly suggested in any one or all of the references to justify combining their teachings; rather the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art (In re Keller, 642 F.2d 413, 288 USPQ 871 (CCPA 1981)). In addition, only a reason, suggestion or motivation needs to appear in the cited prior art in order to combine references under 35 U.S.C. 103. *Pro Mold Tool Col. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629 (Fed. Cir. 1996). In the instant case, the motivation is that serotonin receptors are an important class of G-protein coupled receptors, have an important biological activity and are of potential interest to psychopharmacology as taught by Kohen et al.

Second, while the amino acid sequence taught by Kohen et al. has a single amino acid difference with SEQ ID NO: 449 over the entire sequence of 440 amino acids, both the reference and the instant specification address the same molecule: the human 5-HT₆ serotonin receptor. The instant specification fails to assert that the amino acid sequence of SEQ ID NO: 449 represents a different human 5-HT₆ serotonin receptor from the teaching of Kohen et al. On the contrary, the specification refers twice to the human 5-HT₆ serotonin receptor taught by Kohen et al. (Table C of page 15; Table E of page 46). The specification further states that "Table E below indicates the GenBank Accession number for which the endogenous receptors set forth above can be located, and for which the endogenous nucleic and amino acid sequences are provided." (bottom of page 46). Therefore, in view of the instant disclosure, one skilled in the art would reasonably recognize that both SEQ ID NO: 449 and the human 5-HT₆ serotonin receptor taught by Kohen et al. are the same molecule.


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